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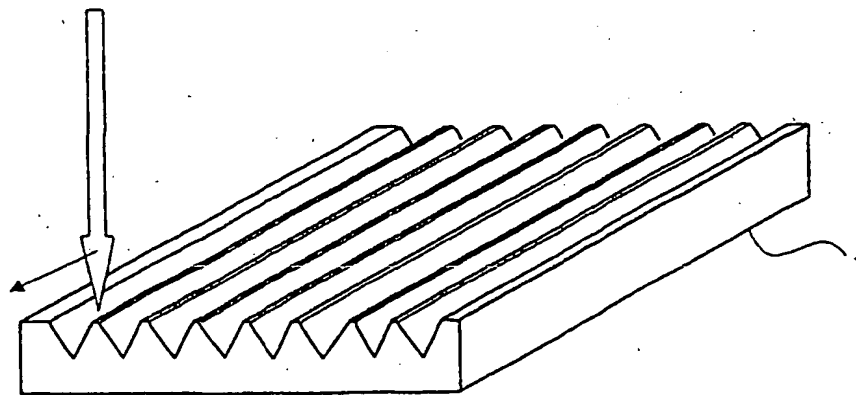
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(54) Title: FIBER ARRAY FOR OPTICAL COMMUNICATION AND METHOD OF MANUFACTURING THE FIBER ARRAY

(54) 発明の名称: 光通信用ファイバアレイおよびその製造方法

パルスレーザー光 A



A...PULSE LASER BEAM

(57) Abstract: A multicore fiber array for optical communication having a high dimensional accuracy, easily manufactured at a low cost, and capable of reducing the use amount of adhesive agent when optical fibers are fixed to a base material, comprising the base material for inserting the optical fibers therein and a retaining plate for pressingly fixing the inserted optical fibers, characterized in that the base material comprises a plurality of grooves for inserting the optical fibers therein, the accuracy of the center-to-center distances between the adjacent insert holes is within  $\pm 0.5 \mu\text{m}$ , and a parallelism between the adjacent insert holes in groove longitudinal direction is within  $\pm 0.1^\circ$ .

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP03/05779

A. CLASSIFICATION OF SUBJECT MATTER  
Int.Cl<sup>7</sup> G02B6/36

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl<sup>7</sup> G02B6/04-6/08, G02B6/24, G02B6/36-6/40

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Jitsuyo Shinan Koho	1922-1996	Toroku Jitsuyo Shinan Koho	1994-2003
Kokai Jitsuyo Shinan Koho	1971-2003	Jitsuyo Shinan Toroku Koho	1996-2003

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 64-44403 A (Fujitsu Ltd.), 16 February, 1989 (16.02.89), Page 3, upper left column, line 18 to page 3, upper right column, line 4 (Family: none)	1-8
Y	JP 2002-156548 A (Kyocera Corp.), 31 May, 2002 (31.05.02), Claim 5; Par. Nos. [0015], [0020], [0035] to [0036] (Family: none)	1-8
Y	JP 2002-40293 A (Kyocera Corp.), 06 February, 2002 (06.02.02), Claims 6 to 8; Par. Nos. [0027] to [0031], [0035] to [0036] (Family: none)	1-8



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search  
29 May, 2003 (29.05.03)Date of mailing of the international search report  
10 June, 2003 (10.06.03)Name and mailing address of the ISA/  
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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 760488 A1 (NGK Insulators, Ltd.), 05 March, 1997 (05.03.97), Page 5, lines 39 to 41 & JP 9-120014 A & US 6027253 A	1-8